



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,523	06/29/2001	Rickard Nelger	1076.40323X00	2984
22907	7590	08/09/2007		
BANNER & WITCOFF, LTD. 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051			EXAMINER VU, NGOC K	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 08/09/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/893,523

Applicant(s)

NELGER ET AL.

Examiner

Ngoc K. Vu

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 31-37 and 39-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31,32,36,37 and 39-41 is/are rejected.
- 7) ☒ Claim(s) 33-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/7/2006 has been entered.

***Response to Arguments***

2. Applicant's arguments filed 10/10/2006 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 31, 32, 36, 37, 39-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eskicioglu et al. (US 20020146125 A1) in view of Carolan et al. (US 20020036658 A1) in view of Watchfogel et al. (US 20010042203 A1).

Regarding claim 31, Eskicioglu teaches a method for use in a conditional access system, in which a first scrambled broadcast stream is transmitted to a first decoder (within one of DTVs) by a first service provider (one of broadcasters) in a first region and a second scrambled broadcast stream is transmitted to a second decoder (within other DTV) by a second service provider (other broadcaster) in a second region different from said first region (see FIG 1; 0015-0017; 0027), said first and second decoders being operable to receive control messages including information for descrambling (entitlement messages and descrambling keys

Art Unit: 2623

– 0018; 0023; 0027) the first and second broadcast streams, the method comprising: the second service provider receiving from a user a request for access to the second broadcast stream at the second decoder (request for services, e.g., PPV events and/or packages – 0026).

Eskicioglu does not explicitly teach the feature of checking whether the user is authorized to access the second broadcast stream by checking that a subscription arrangement exists between the user and the first service provider. However, Carolan teaches checking the subscriber's credentials and credit information utilizing a network-based subscription/authorization process for the various services shared on the access network infrastructure to determine whether a user is authorized to change to a new service provider from an existing service provider. (See 0016; 0058-0060). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Eskicioglu by checking whether the user is authorized to access the second broadcast stream by checking that a subscription arrangement exists between the user and the existing service provider as taught by Eskicioglu in order to increase the effective security of access to a new service provider in the network.

Eskicioglu further teaches that a conditional access user in Princeton region would have the corresponding private keys for Trenton, New York, Philadelphia any other surrounding geographic regions in his/her set top box or DTV for descrambling the different broadcast signals. See 0108-0109. Eskicioglu does not explicitly teach transmitting control messages separately from the broadcast stream. However, Watchfogel teaches that transmitting ECMs to a receiver separately from a scrambled broadcast message (see 0060). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Eskicioglu by sending control messages or ECMs separately from the

Art Unit: 2623

scrambled broadcast message as disclosed by Watchfogel in order to gain the benefit of bandwidth conservation.

Regarding claim 32, Eskicioglu as modified by Watchfogel further teaches that control messages are alone sufficient to descramble said second broadcast stream (the scrambled broadcast message) (see Watchfogel: 0068, 0070).

Regarding claim 36, the combined teachings of Eskicioglu and Watchfogel teach that the first decoder (one of the DTVs) is arranged to receive control messages (e.g., ECM) transmitted with the first broadcast stream and the second decoder (other DTV) is arranged to receive control messages separate from the second broadcast stream (Eskicioglu: 0018, 0023, 0027; Watchfogel: 0060).

Regarding claim 37, Eskicioglu teaches that the first decoder is associated with a first smart card, and a user uses a second smart card to request access to the second broadcast stream at the second decoder (each DTV comprises a conditional access device, e.g., set top box, includes a smart card. See 0104- 0106).

Regarding claim 39, system claim is analyzed with respect to method claim 31 above.

Regarding 40-44, Eskicioglu does not explicitly disclose that the smart card is a software/virtual smart card. Official Notice is taken that software/virtual smart card technology is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Eskicioglu by utilizing software/virtual smart card instead of physical smart card for the advantages of reduce cost.

Regarding claims 46-47, Eskicioglu does not teach removing the user's subscription right through ECMs sent to the first decoder. Official Notice is taken that removing ECM or EMM data component from the data stream to ensure that unauthorized user can not access descrambled entitlement is well known in the art. Therefore, it would have been obvious to one

Art Unit: 2623

of ordinary skill in the art at the time the invention was made to modify the system of Eskicioglu by removing ECM or EMM data component from the data stream to ensure that unauthorized user can not access descrambled entitlement for security purpose.

***Allowable Subject Matter***

5. Claims 33-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc K. Vu whose telephone number is 571-272-7306. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ngoc Vu/

NGOC K. VU  
PRIMARY EXAMINER  
Art Unit 2623

August 6, 2007